

# Work Order ID 64812

Friday, December 17, 2010 8:00:05 AM



Page 1

Item ID: D3641-1

Accept



Setup Start



Revision ID:

Item Name: Cover

Stop



Start Date: 12/16/2010 Start Qty: 6.00



Cust Item ID:

Required Date: 1/19/2011 Req'd Qty: 6.00



Customer:

Reference:

Approvals:

Process Plan:

Date: 12-17

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3641

Rev C

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

5052.032

1-Cut as per Dwg D3641

Dwg Rev: C

Prog Rev: C

2-Deburr if necessary

12-17

(7)

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

12-17

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

Sub 12/17

(7)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Page 2

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Setup Start



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Stop



Item Name: Cover

Start Date: 12/16/2010 Start Qty: 6.00



Cust Item ID:

Required Date: 1/19/2011 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130



Brake NC

NC BRAKE

Memo

0.00

0.00

SB 11/03/01

7

Brake NC

Form as per Dwg D3641-1

140



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

8 11/03/01

7

Quality Control

-1

150



HandFinish

Chemical Conversion Coat per QSI005 4.1

Memo

0.00

0.00

7 m. 11/03/02

7X

Hand Finishing

W/O:		WORK ORDER CHANGES					
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Page 3

Item ID: D3641-1

Accept



Setup Start



Revision ID:

Item Name: Cover

Stop



Start Date: 12/16/2010 Start Qty: 6.00



Cust Item ID:

Required Date: 1/19/2011 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 	QC3- Inspect Part Finish	0.00							
QC Quality Control	Memo	0.00				7	0	11/03/02	
170 	Identify as per dwg & Stock Location: 260	0.00							
Packaging Packaging	Memo	0.00							
180 	QC21- Final Inspection - Work Order Release	0.00							
QC Quality Control	Memo	0.00							

11/03/03 (7)

11/03/03

MF  
11-03-03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Friday, December 17, 2010 8:00:10 AM

Page 1

Work Order ID: 64812

Parent Item: D3641-1

Parent Item Name: Cover



Start Date: 12/16/2010

Required Date: 1/19/2011

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A New Issue 07-07-20 JLM Verified By:EC  
IPP Rev:B ECN 1050 rev.b as per dwg 08-01-10 DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M5052H32S.032

Purchased

No

100

sf

69.6600

0.7987

5.044421

6 v



116657-17

5052-H32 .032 Sheet

## Location

## Loc Qty

## Loc Code

MAT

16.8

115638

16.8

MAT23

52.86

100470

3

103321

2.76

105998

5

108462

6.3

109478

9

111448

3

112664

20.8

15031

3

116657

116657

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	64812
<b>Description: Cover</b>		<b>Part Number:</b>	D3641-1
<b>Inspection Dwg: D3641</b>	<b>Rev: B</b>	<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.191	+0.005/-0.001	.194	X		V 1802	
0.191	+/-0.010	.193	X		V	
0.37	+/-0.030	.37	X		V	
0.54	+/-0.030	.537	X		V	
0.69	+/-0.030	.69	X		V	
11.86	+/-0.030	11.86	4		T	
12.22	+/-0.030	12.22	X		T	
23.37	+/-0.030	23.37	X		T	
23.54	+/-0.030	23.54	1		T	
23.69	+/-0.030	23.69	0		T	
24.06	+/-0.030	24.06	X		T	
0.5	+/-0.030	.500	X		V	
4.28	+/-0.030	4.285	X		V	
4.70	+/-0.030	4.787	X		V	
0.032	+/-0.010	.032	X		V	

<b>Measured by:</b> RB	<b>Audited by:</b> S	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 11-2-17	<b>Date:</b> 11/02/17	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	09.09.15	New Issue	KJ	AS

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

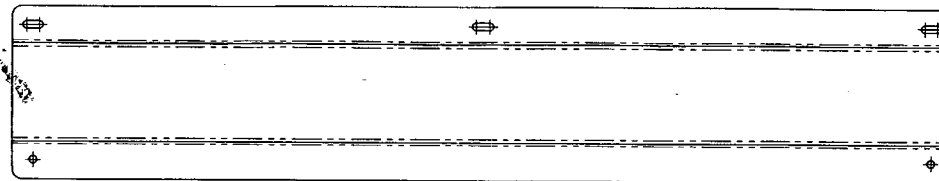
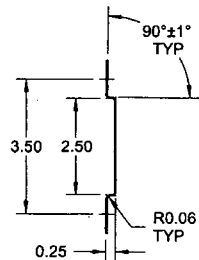
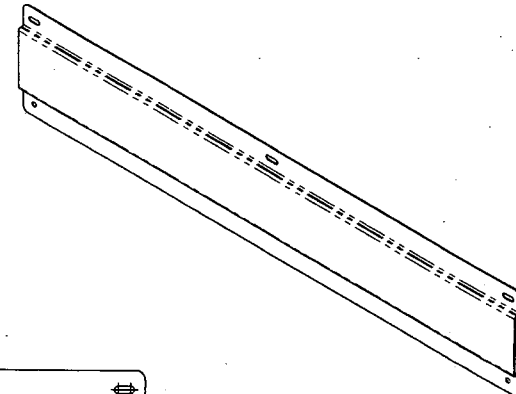
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

SHOP COPY  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. *44812*  
*2/10/12-17*



**D3641-1 COVER**  
 (REPLACES GENEVA P/N G10606-3/-6)  
 (MAKE FROM D3641-1F FLAT PATTERN)

**RELEASED**  
 2009-11-18  
*W*

**NOTES:**

- 1) MATERIAL: D3641-1F FLAT PATTERN
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3641-1" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.35 lbs

C	REFORMAT DRAWING TO CURRENT STANDARDS; D3641-3 WAS -4 (ZN C4-2); ADD D3641-4 VIEW (ZN A4-2); MOVE -1F/-3F FLAT PATTERN TO SHEET 3. PER NCR 09-076	RF	09.10.02
B	UPDATE PROFILE TO MATCH TOOLING; GENERAL UPDATE	LE	07.10.16
A	NEW ISSUE; REPLACES G10606	LE	07.07.27
REV.	DESCRIPTION	BY	DATE
DESIGN	TS		
DRAWN	RF		
CHECKED	<i>[Signature]</i>		
MFG. APPR.	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	09.10.02		

<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
DRAWING NO. <b>D3641</b>	REV. C SHEET 1 OF 3
TITLE <b>COVER</b>	SCALE NTS

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

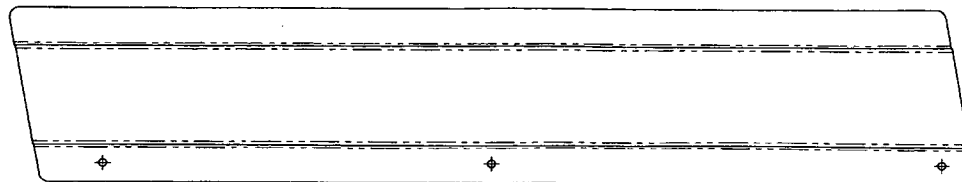
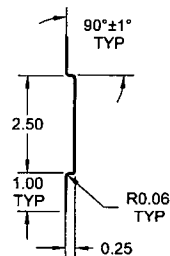
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

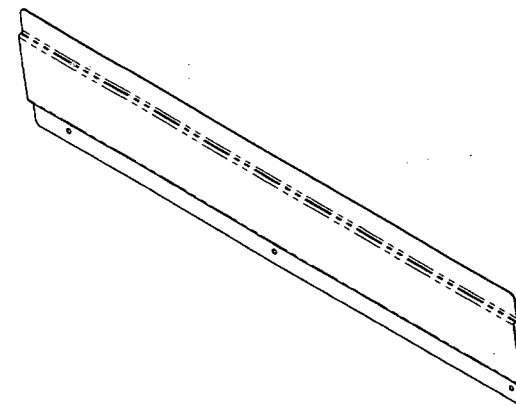
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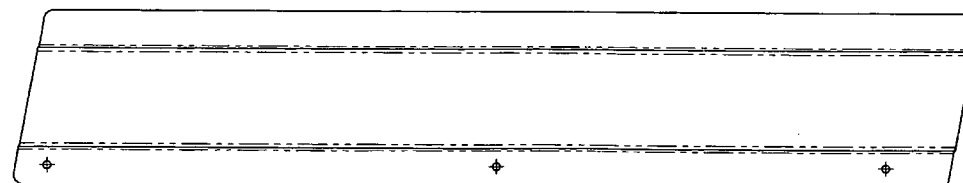
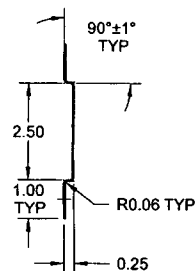
8 7 6 5 4 3 2 1



**D3641-3 COVER**  
(REPLACES GENEVA P/N G10606-5)  $\triangle C$   
(MAKE FROM D3641-3F FLAT PATTERN)



**D3641-3 COVER (SHOWN)**  
**D3641-4 COVER (OPPOSITE)**



**D3641-4 COVER**  
(REPLACES GENEVA P/N G10606-4)  $\triangle C$   
(MAKE FROM D3641-3F FLAT PATTERN)

W064812

**RELEASED**  
2009 -11-10  
WJ

**NOTES:**

- 1) MATERIAL: D3641-3F FLAT PATTERN
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3641-3/-4" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.36 lbs

DESIGN	TS	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO. <b>D3641</b>	REV. C SHEET 2 OF 3
MFG. APPR.	<i>[Signature]</i>	TITLE <b>COVER</b>	SCALE NTS
DATE	09.10.02	<small>COPYRIGHT © 2007 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

8 7 6 5 4 3 2 1

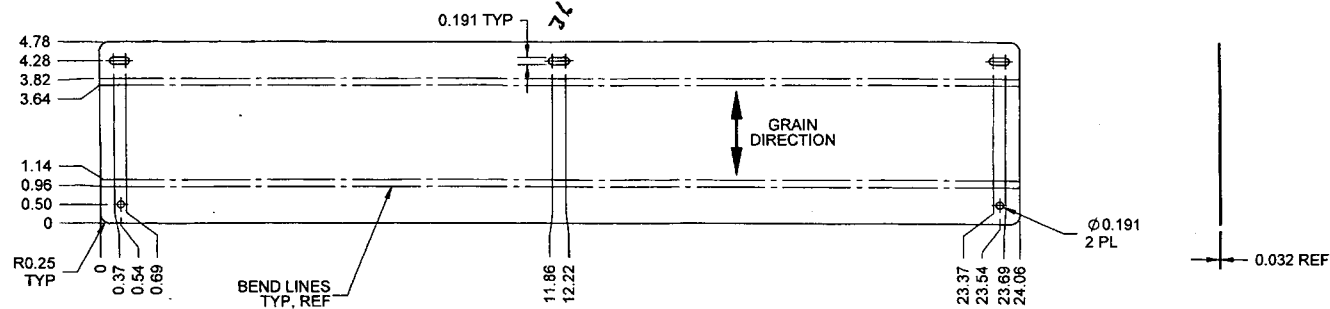
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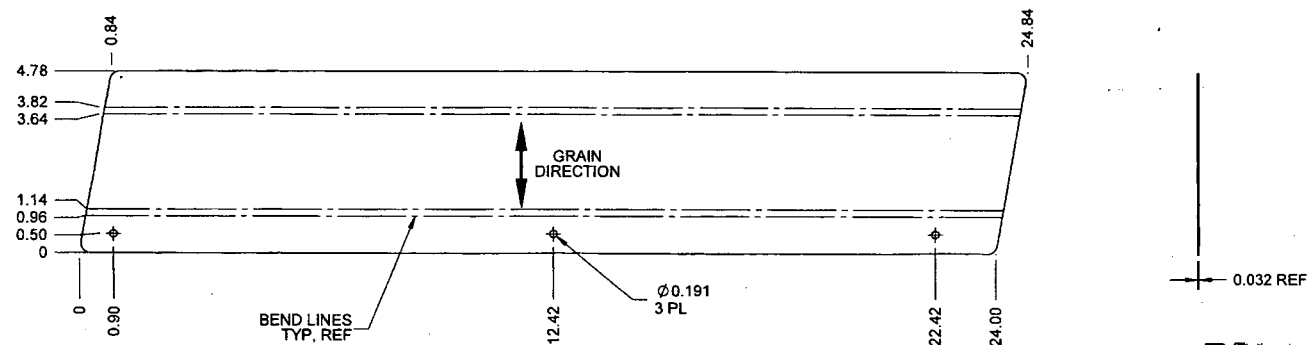
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**NOTE:** Date & initial all entries



**D3641-1F FLAT PATTERN**



**D3641-3F FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: 5052-H32 ALUMINUM 0.032 THICK PER QQ-A-250/8 OR AMS 4016 OR ASTM B209  
REF DART SPEC M5052H32S.032
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3641-1F-3F" USING REMOVABLE TAG
- 7) WEIGHT: 0.36 lbs

DESIGN	TS	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.	<del>TS</del>	D3641	SHEET 3 OF 3
APPROVED	<del>RF</del>	TITLE	SCALE
DE APPR.	<del>TS</del>	COVER	NTS
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2009-11-10

*u1064812*

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